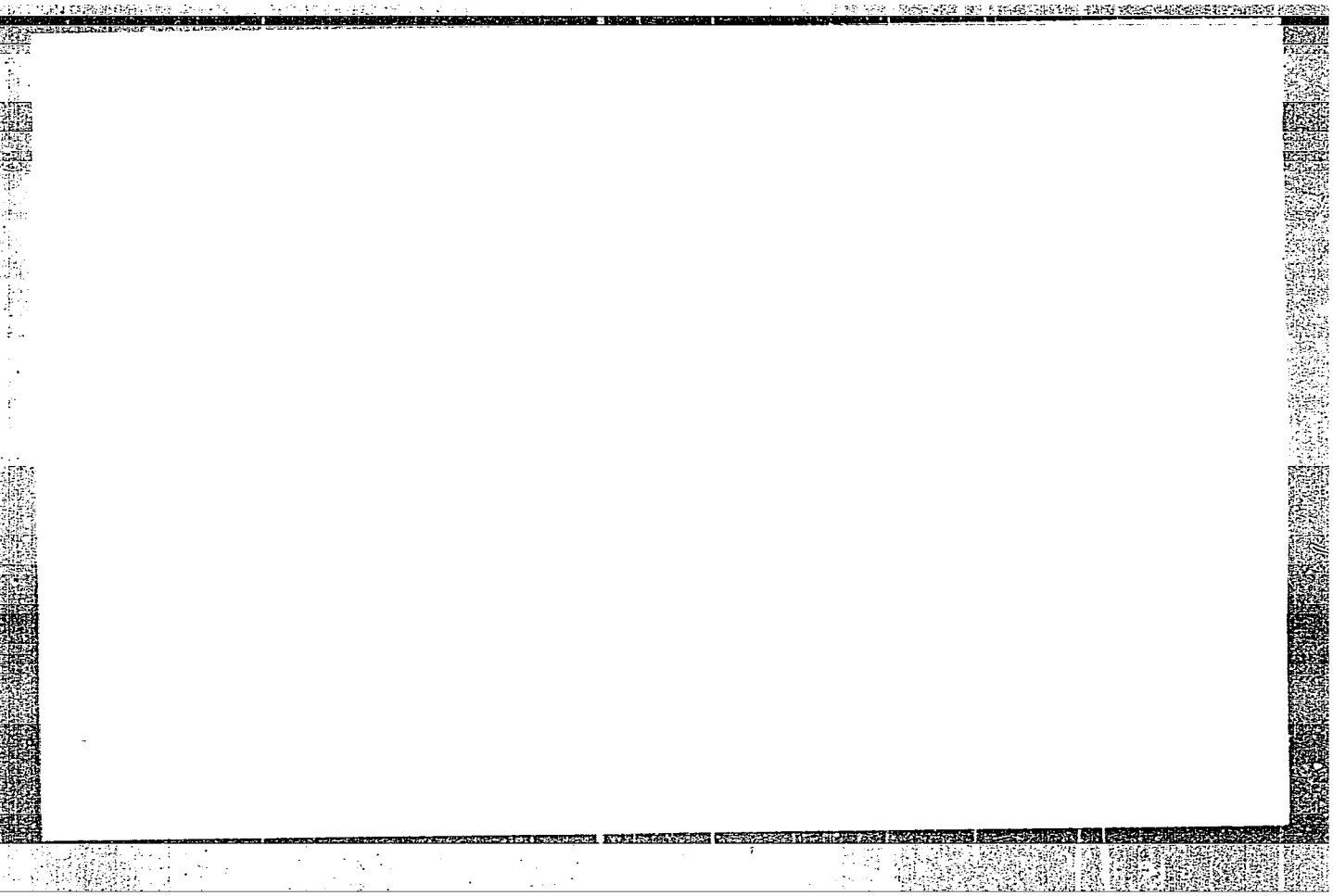

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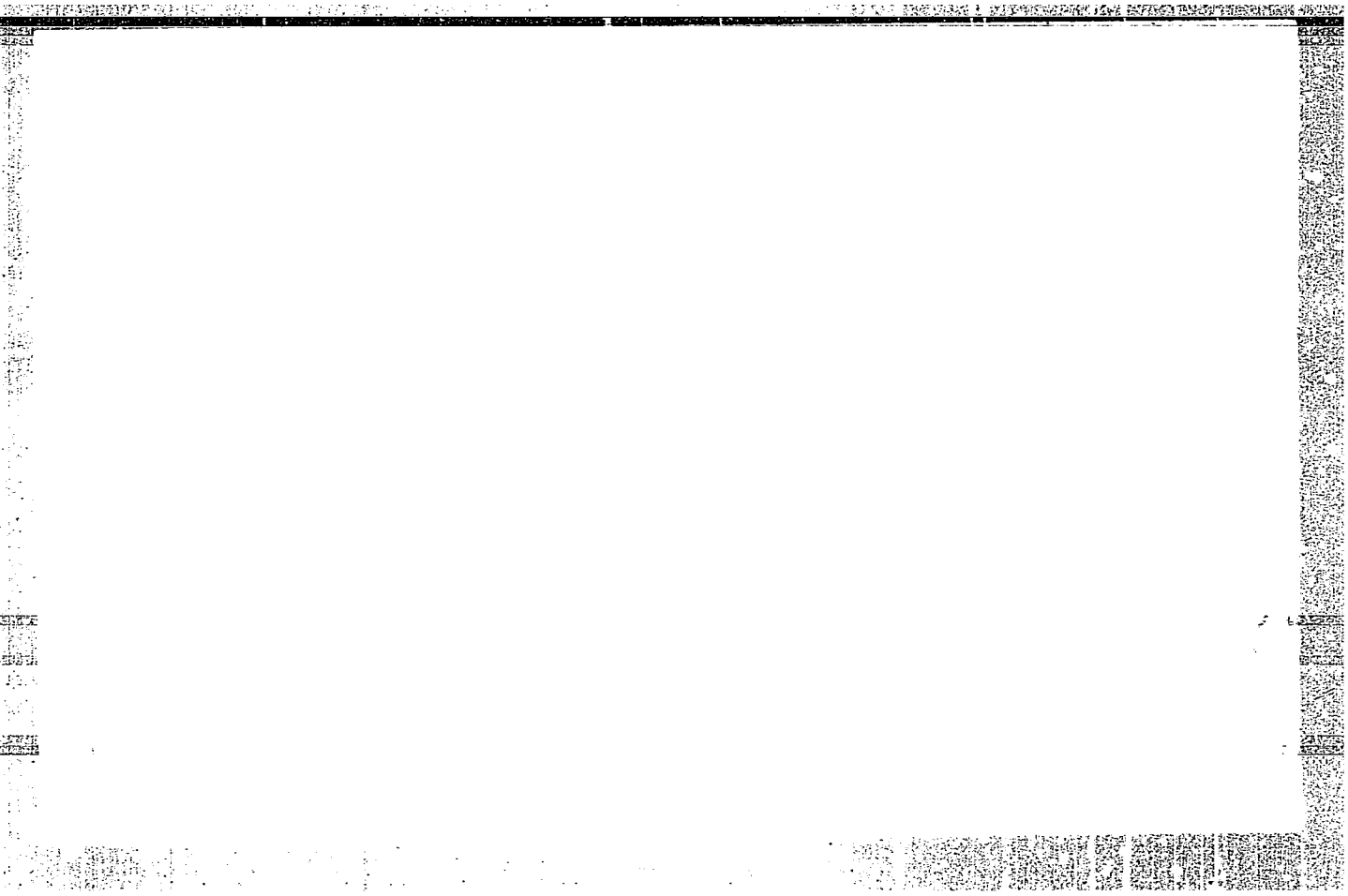

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VASILache, Sergiu

2

Vasilache, Sergiu. Sur la répartition spectrale des valeurs ~~du paramètre λ~~ dans les systèmes d'équations intégro-différentielles linéaires du type Volterra. Com. Acad. R. P. Romîne 2 (1952), 311–318. (Romanian. Russian and French summaries)

I:- F/H

Methods used in a preceding paper [Acad. Repub. Pop. Române. Bul. Şti. Secţ. Şti. Mat. Fiz. 4 (1952), 7–18; MR 15, 630] are applied to a system of linear integro-differential equations, viz.,

$$\sum_{\nu=1}^{n}\sum_{i=0}^{m} H_{k\nu i}(x)\varphi_\nu^{(i)}(x)=\lambda\int_a^x \sum_{\nu=1}^{n}\sum_{i=0}^{m} K_{k\nu i}(x,s)\varphi_\nu^{(i)}(s)+f_k(x),$$

and similar results are obtained. *T. H. Hildebrandt.*

VASILACHE, Sergui

Vasilache, Sergiu. Le problème de Cauchy et la répartition spectrale des valeurs du paramètre λ, dans la résolution des équations intégro-différentielles. Acad. Repub. Pop. Române. Bul. Şti. Secţ. Şti. Mat. Fiz. 4, 7–18 (1952). (Romanian. Russian and French summaries)

The integro-differential equation considered is of the Volterra type, viz.,

$$\sum_{i=0}^{n} H_i(x)\varphi^{(i)}(x) = f(x) + \lambda \int_a^x \sum_{i=0}^{p} K_i(x, y)\varphi^{(i)}(y)dy.$$

A similar equation with $n=0$, and fixed limits has been considered by Bounitzky [Bull. Sci. Math. (2) 32, 14–31 (1908)], equations involving both variable and fixed limits, but not the parameter λ by Andreoli, [Atti Accad. Naz. Lincei. Rend. Cl. Sci. Fis. Mat. Nat. (5) 22, 2° semestre, 409–414 (1913)]. Following the method of Andreoli, the $\varphi^{(i)}(x)$ for $i<n$, are expressed in terms of $\varphi^{(n)}(x)$ and the equation reduced to the form

(A) $$H_n(x)\varphi^{(n)}(x) = f(x) + \lambda g(x) + \int_a^x (K_1(x, y) + \lambda K_2(x, y))\varphi^{(n)}(y)dy.$$

From this it follows that if $n \geqq p$, there exists a solution as an entire function of λ; if $n = p-1$, the solution is expressed in a series of rational fractions in λ, valid for λ outside of certain intervals; and for $n \leqq p-2$ the solution is expressible as an entire function in $1/\lambda$. The same theorem is also deduced by integrating the equation n times, expressing $\varphi^{(i)}(x)$ in terms of $\varphi(x)$, and reasoning with an equation in φ similar to (A). *T. H. Hildebrandt.*

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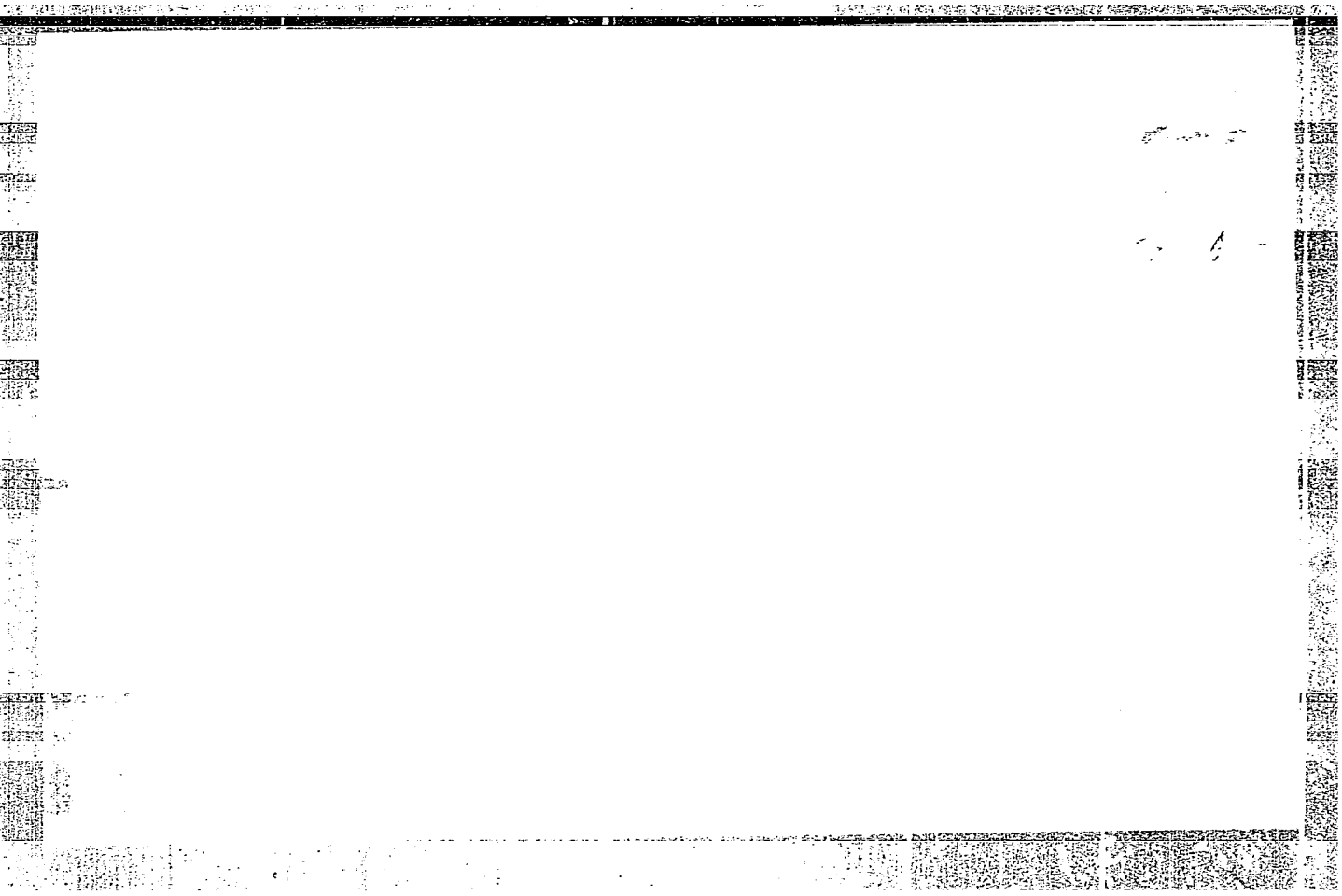

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858720016-3"

VASILACHE, Sergiu

"Sur une nouvelle equation des telegraphistes."Revue de Matematiques et de Physique, Vol. 2, 1954

Vasilache, Sergiu

3

1 - F/W

MS

1/2

1

(over)

Vasilache, Sergiu. Sur quelques nouveaux problèmes aux limites pour certaines classes d'équations intégro-différentielles ou aux dérivées partielles. Acad. Repub. Pop. Romîne. Stud. Cerc. Mat. 6 (1955), 55-78. (Romanian. Russian and French summaries)

The integro-differential equation considered is

$$\sum_{p=0}^{m}\sum_{q=0}^{n} H_{pq}(x,y)\phi_{x^p y^q}^{(p+q)}(x,y) = f(x,y) + \lambda\int_a^x\int_b^y \sum_{p=0}^{m}\sum_{q=0}^{n} K_{pq}(x,y;u,v)\,\phi_{u^p v^q}^{(p+q)}(u,v)\,du\,dv,$$

where a solution is sought subject to the initial conditions

$$\phi_{x^s}^{(s)}(x,y)|_{x=a} = g_s(y);\ s=0,1,\cdots,n-1;$$

$$\phi_{x^n y^r}^{(n+r)}(x,y)|_{y=b} = h_r(x)\ (r=0,1,\cdots,m-1).$$

Following the method of a previous paper [Acad. Repub. Pop. Române. Bul. Ştiinţ. Secţ. Ştiinţ. Mat. Fiz. 4 (1952), 7–18; MR 15, 630], the partial derivatives $\phi_{x^s y^r}^{(s+r)}(x,y)$ for $s+r<p+q$ are expressed in terms of $\phi_{x^m y^n}^{(m+n)}(x,y)$, resulting in a Volterra mixed integral equation:

3

Vasilache, Sergiu

$$H(x, y)\Phi(x, y)+\int_a^x K(x, y, u)\Phi(u, y)du+$$
$$\int_b^y L(x, y, v)\Phi(x, v)dv+\lambda\int_a^x\int_b^y M(x, y, u, v)\Phi(u, v)dudv$$
$$=F(x, y)+\lambda G(x, y)$$

2/2

in $\phi_{x^m y^n}{}^{m+n}(x, y)=\Phi(x, y)$, leading to theorems on the solution of the integro-differential equation.

T. H. Hildebrandt (Ann Arbor, Mich.).

I-F/W

MS

Vasilache, Sergiu. Sur la solution de l'équation

$$\sum_{1}^{m} H_i(x)\varphi^{(i)}(x)=f(x)+\lambda\int_a^x\left(\frac{K(x,s)}{(x-a)^p}\right)\varphi^{(n)}(s)ds.$$

Acad. Repub. Pop. Romine. Bul. Şti. Secţ. Şti. Mat. Fiz. 7 (1955), 87–95. (Romanian. Russian and French summaries)

1/2

In the integro-differential equation of the title it is assumed that $m<n$, $p>1$ and $K(x,x)\neq 0$ on (a,b). The well known identity

$$\varphi^{(i)}(x)=\varphi^{(i)}(a)+\varphi^{(i+1)}(a)(x-a)+\varphi^{(n-i-1)}(a)\frac{(x-a)^{n-i-1}}{(n-i-1)!}+$$
$$+\int_a^x\frac{(x-s)^{n-i-1}}{(n-i-1)!}\varphi^{(n)}(s)ds$$

is used to reduce the equation to an integral equation of the first kind in $\varphi^{(n)}(s)$. If $m<n-1$, the customary operation of taking the derivative of the equation results in an equation of the form

$$\varphi^{(n)}(x)=\mu(x-a)^{p-1}F(x)+\int_a^x[(x-a)^{p-1}Q_1(x,s)$$
$$+\mu Q_2(x,s)]\varphi^{(n)}(s)\,ds,$$ (over)

2

Vasilache, Sergiu

where $\mu=1/\lambda$, which has a solution in $\varphi^{(n)}(x)$ in a permanently convergent power series in μ and for which $\varphi^{(n)}(a)=\varphi^{(n+1)}(a)=\varphi^{(n+p-2)}(a)=0$. When $m=n-1$, the coefficient of $\varphi^{(n)}(x)$ involves the expression

$$\lambda K(x, x)-(x-a)^p H_{n-1}(x)$$

so that values of λ for which this expression vanishes on (a, b) are barred.

T. H. Hildebrandt.

2/2

Smd

VASILACHE, SERGIU

1

Math 1 - F/W

Vasilache, Sergiu. Sur certains problèmes de la théorie des infiltrations. Acad. R. P. Romîne. Bul. Şti. Secţ. Şti. Mat. Fiz. 7 (1955), 365–385. (Romanian. Russian and French summaries)

In this paper the author extends the results obtained in previous investigations in the theory of infiltrations [Com. Acad. R. P. Romîne 1 (1951), 331–336, 551–555; MR 17, 425]. He studies the problem of the plane movement of incompressible fluids in porous media bounded by polygons. Here again the problem is reduced to the solution of Laplace's equation ($\Delta\varphi(x, y)=0$) for the velocity potential (Darcy-type approximation). The values of $\varphi(x, y)$ are given on certain segments of the contour of the polygon, while for the rest of the boundary the normal derivative $d\varphi/dn$ is given. The author's solution of the problem, by means of conformal transformation, leads to the mixed problem of Volterra [Ann. Mat. Pura Appl. (2) 11 (1882), 1–55] of complex-function theory. The problem consists of determining a holomorphic function $f(z)=\varphi(x, y)+i\psi(x, y)$ uniquely, when $\varphi(x, y)$ is given on some part of the contour, while $\psi(x, y)$ is given on the rest of the contour [cf. A. Signorini, ibid. (3) 25 (1916), 253–273]. The author makes two applications of his theory, viz. a) the infiltration in a region between two lines, b) the movement of an incompressible

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VASILACHE, SERGIU

fluid in a homogeneous and isotropic medium bounded by a step-like basin. After a lengthy analysis, the author obtains solutions of the problems in terms of elliptic functions. [A similar problem has been solved by N. N. Pavlovskiĭ: Teoriya dviženiya gruntovyh vod pod gidrotehničeskimi sooruženiyami i eë osnovnye priloženiya, Petrograd, 1922.] *K. Bhagwandin* (Oslo). 3/2

VASILACHE, SERGIU.

VASILACHE, SERGIU. Elemente de teoria multimilor si a structurilor algebrice. "Bucuresti" Editura Academiei Republicii Populare Romine, 1956. 233 p.
"Elements of the theory of groups and algebraic structures. Bibl."
RPR Not in DLC

So: East European Accession, Vol. 6, No. 5, May 1957

Rumania/Nuclear Physics - Nuclear Engineering and Power, C-8

Abst Journal: Referat Zhur - Fizika, No 12, 1956, 34149

Author: Vasilache, Sergiu

Institution: None

Title: Mathematical Problems of Nuclear Power Engineering

Original Periodical: An. Rom. Sov. Ser. mat.-fiz., 1956, 10, No 2, 29-54; Rumanian

Abstract: None

1 of 1

RUMANIA/Nuclear Physics - Nuclear Power and Technology. C-8

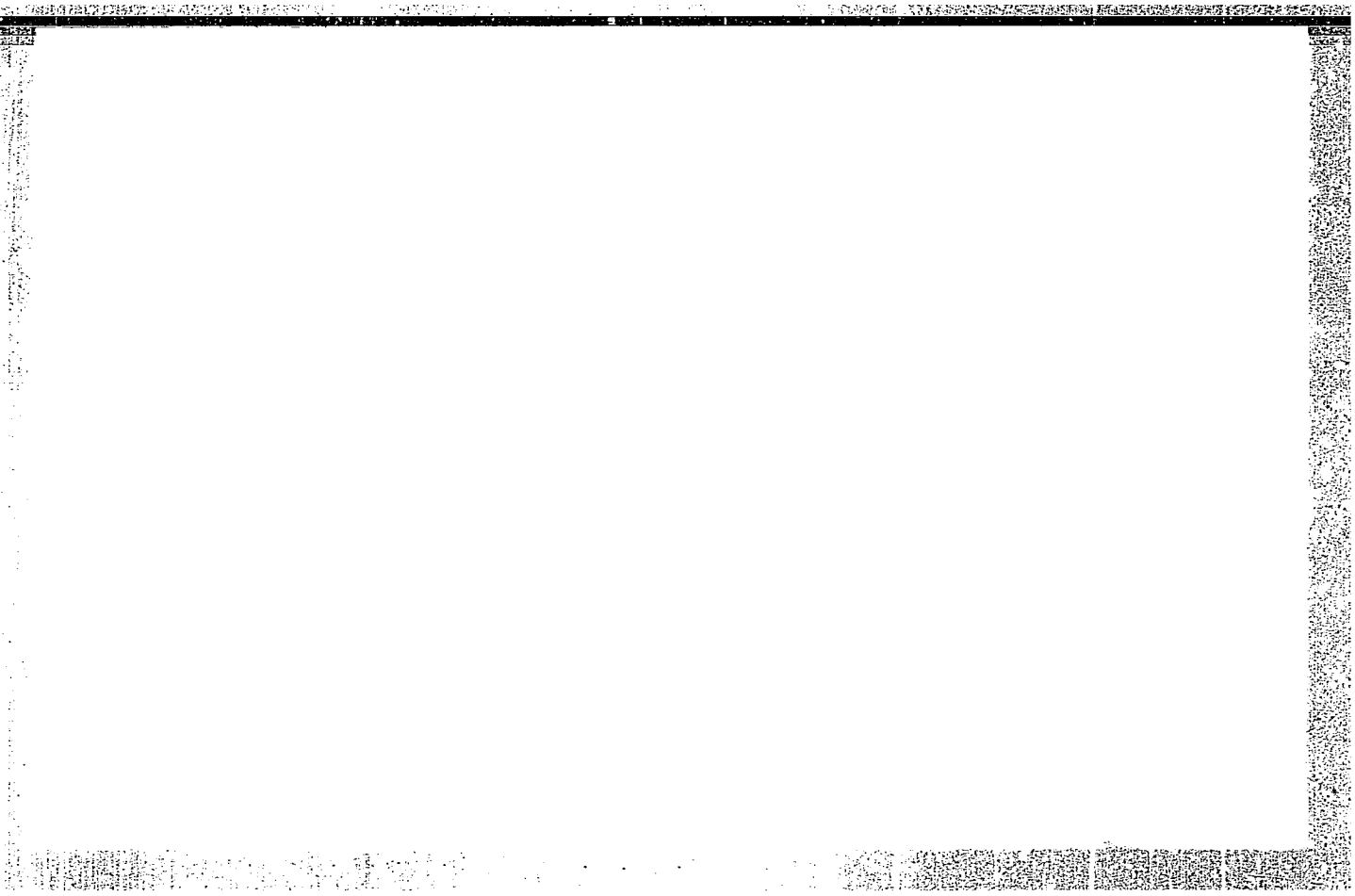
Abs Jour : Ref Zhur - Fizika, No 4, 1957, 8885

Author : Vasilache, S.
Inst :
Title : Investigation of Soviet Scientists in the Field of Mathematical Calculations for Nuclear Reactors.

Orig Pub : An. Rom.-Sov. Ser. mat.-fiz., 1956, 10, No 3, 5-32

Abstract : No abstract.

Card 1/1



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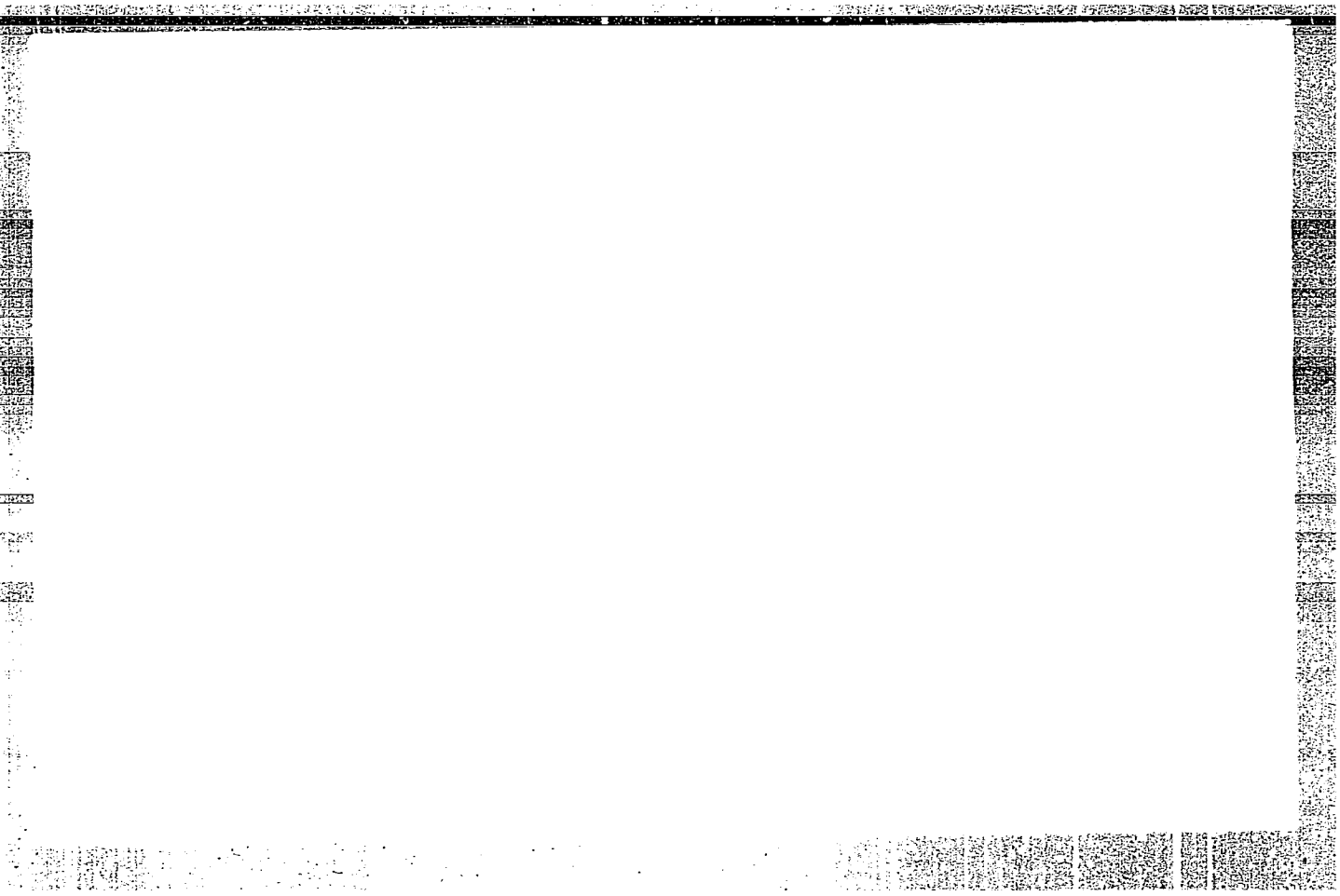

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001858720016-3"

VASILACHE S.

An algebraic operational calculus for functions of two variables. In French. (To be contd.) p. 181.

REVUE DE MATHEMATIQUES PURES ET APPLIQUEES. JOURNAL OF PURE AND APPLIED MATHEMATICS. (Academia Republicii Populare Romine) Bucuresti. Rumania. Vol. 2, 1957.

Monthly List of East European Accessions (EEAI) LC. Vol. 9, no. 1, January 1960.

Uncl.

VASILACHE S.

Infiltration of incompressible liquids in a porous medium with variable permeability, external as regards the infinite cylinder. In Russian. p. 475.

REVUE DE MATHEMATIQUES PURES ET APPLIQUEES. JOURNAL OF PURE AND APPLIED MATHEMATICS. (Academia Republicii Populare Romine) Bucuresti. Rumania. Vol. 2, 1957.

Monthly List of East European Accessions (EEAL LC Vol. 9, no. 1, January 1960. UNCL

1:1702

S/044/62/000/010/002/042
B112/B102

16.4600

AUTHOR: Vasilach, Serge

TITLE: Algebraic calculus of operators for generalized functions with a a ground space in R_+^n, $n \geqslant 1$, Ch. I, II, III

PERIODICAL: Referativnyy zhurnal. Matematika, no. 10, 1962, 12 - 13, abstract 10B55 (Rev. math. pures et appl. CRPR), v. 4, no. 2, 1959, 185 - 219; v. 5, nos. 3 - 4, 1960, 495 - 531; v. 6, no. 1, 1961, 69 - 100)[French;])

TEXT: This work comprises three chapters published separately. Its aim is to extend Mikusinskiy's foundation method of the operator calculus to generalized original functions (initial functions). The ground functions are assumed to be dependent on n real non-negative variables (whose domain of definition is contained in R_+^n). The ring of the ordinary functions $f(t)$ (when restricting to the case $n = 1$ for brevity), $t \geqslant 0$, with $f + g$ as the operation of addition and with

$$f * g = \int_0^t f(\tau) g(t - \tau) d\tau$$

Card 1/3

as the operation of multiplication, has no null divisors. This fact is the starting point of Mikusinskiy's construction. His foundation of the operator calculus, which from several points of view is more satisfactory than others, has the defect of excluding some important generalizations from being taken into account, as for instance Dirac's δ-function which represents the unit in the ring of the original functions. It is known, that in the operator calculus, when such simple generalized functions are based on the theory of Laplace transformations they are considered by using only elementary concepts of the theory of generalized functions. The author set himself the problem of freeing Mikusinskiy's method from the defect mentioned above. In chapter I, consisting of 6 sections (1. Axiomatization and Fundamental Formulas, 2. Fundamental Theorems, 3. Solution of Linear Differential Equations with Constant Coefficients, 4. Solution of Systems of Differential Equations with Constant Coefficients. 5. Integral Equations of the Volterra Type, 6. Integrals and Derivatives of Non-integral Order), the fundamental apparatus of the generalized operator calculus is developed. This is based on a single theorem in the theory of generalized functions, which states that the corresponding generalized functions form an associative and commutative

algebra of convolutions (i. e. an algebra with a multiplication of the folding type) without any null divisors. Chapter II contains the topological material needed to derive the operator calculus for integrating partial differential equations in an effective manner. This chapter has two parts: (A) A topological algebra of convolutions of generalized functions whose ground functions have domains of definition uniformly bounded from below, and (B) Topology in the quotient field of the convolutions of such generalized functions. Here, the theorems of functional analysis and topology needed for the following are represented, and the fundamental definitions of an algebra of topological algebras as points of departure for constructing "iterated" operator calculi are formulated. In Chapter III such operator calculi are constructed effectively. Mikusinskiy's foundation is shown, as had been expected, to be be sufficient in this general case too without any modification, as long as the topological presentation of the elements of the ground rings is disregarded. [Abstracter's note: Complete translation.]

Card 3/3

VASILACHE, Sergiu (Bucarest)

Algebraic operational calculation of support distributions in R =] - ∞, 0]. Bull math Rum 4 no.1:115-126'60.

1. Institut de Mathematique de la Republique Populaire Roumaine.

VASILAKE, Sergiu[Vasilache, Sergiu]

On the new problems of limits for certain classes of integrodifferential or partial differential equations. Rev math pures 5 no.2: 251-274 '60. (EEAI 10:9)

(Differential equations)

VASILACH, Serge

Algebraic operational calculus of the distributions with support in
1. Rev math pures 6 no.1:69-100 '61. (EEAI 10:9)

1. Institut de Mathematiques de l'Academie de la Republique Populaire Roumaine.

(Fields, Algebraic) (Calculus of operations)
(Distribution(Probability theory))

VASILACH, Serge

Operational calculation of support distrubutions in R_+^n, $n \geq 1$. Pt. 4-5. Rev math pures 8 no.1:19-66 '63.

1. Institut de Mathematiques de l'Academie de la Republique Populaire Roumaine.

VASILACH, Serge

Algebraic structures of algebraic formal operations. Rev math pures 8 no.3:353-390 '63.

VASILACH, Serge

Algebraic structures of algebraic formal operations. Pt.4. Rev math pures 8 no.4:543-564 '63.

VASILACH, Serge

Algebraic structures of algebraic formal operations.
Rev math pures 8 no. 3:353-390 '63

VASILACH, Serge

Algebraic structures of algebraic formal structures. Pt.2.
Rev math Roum 9 no.4:279-301 '64

VASILACHE, Sergiu

Algebraic structures of algebraic formal operations.
Studii cerc mat 15 no. 4:433-453 '64.

VASILENKO, A. A. [illegible]

Modifitsirovannyy chugun v mashinostroyenii. Kiev, 1950. 165 p.
This book describes government standards of cast iron, mechanical properties of modified cast iron, technolog of cast iron production, physico-chemical processes for the production of modified cast iron.

VASILCA, G.

Utility of the characteristic p-f (V) for circular slide bearings.

P. 499(Academia Republicii Populare Romine. Institutul de Mecanica Aplicata. STUDII SI CERCETARI DE MECANICA APLICATA. Vol. 7, no. 2, Apr./June 1956. Bucuresti, Romania)

Monthly Index of East European Accessions (FEAI) LC. Vol. 7, no.2, February 1958

VASILCA, G.

Study of the coefficient of friction in a circular bearing by means of curves p=g(V). p. 75.
(STUDII SI CERCETARI DE MECANICA APLICATA. Vol. 8, no. 1, Jan/Mar. 1957, Bucuresti, Rumania)

SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, No. 12, Dec.1957. Uncl.

VASILO', T.

Experimental studies on some antifriction materials for substitution for roller bearings.

p. 773 (Academia Republicii Populare Romine. Institutul de Mecanica Aplicata. Studii Si Cercetari De Mecanica Aplicata. Vol. 7, no. 3, July/Sept. 1956. Bucuresti, Rumania)

Monthly Index of East European Accessions (EEAI) LC. Vol. 7, no. 2, February 1958

VASILCA, Gh.; NICA, Al.

Experimental determination of the operational parameters of the bearings in internal-combustion engines. I. Operational parameters, method of work, and experimental installation. Studii cerc mec apl 13 no.3:773-781 '62.

VASILCA, Gh.

Some experimental quantitative aspects of the coefficient of friction in journal bearings. Studii cerc mec apl 13 no.4:957-969 '62.

VASILE, Gh.

"International College of Production Research." Studii cerc mec apl 14 no.4:980-981 '63.

VASILCA, Gh.

"Metallization by pulverization" by Vasile Marcu. Reviewed by Gh. Vasilca. Studii cerc mec apl 14 no. 6: 1507-1508 '63.

VASILCA, Gh.; NICA, Al.

Structural aspects in the working surface of some sliding bearing materials. Rev mec appl 9 no. 3:711-717 '64.

VASILCA, Gh.; NICA, Al.; BITA, O.; DINCA, I.

Some aspects of the effects of the structural type of two aluminum alloys on their sliding and wear-resisting performance. Rev mec appl 9 no.5:1085-1100 '64.

1. Institute of Applied Mechanics, Rumanian Academy.

VASILCA, Gh.; BITA, O.; DINCA, I.

Concomitant action in the process of friction and wear of soft and hard stages in the case of metallic structures with semihard matrix. Studii cerc metal apl 15 no.2:461-473 '64.

1. Submitted December 19, 1963.

VASIL'CHENKO, A.

Fastening carcasses for mechanical skin removal. Mias.ind.SSSR 32 no.2:45 '61. (MIRA 14:7)

1. Upravleniye myasnoy i molochnoy promyshlennosti Stavropol'skogo sovnarkhoza.
(Meat industry--Equipment and supplies)

VASIL'CHENKO, A.A.; YERKAYEV, A.D.; KONOVALENKO, L.A.; PERVITSKIY, V.Ya.; BUD'KO, V.A., inzh., red.; TVERDOVSKIY, V.P., kand. sel'khoz. nauk, red.

[Mechanized growing of corn; based on the practices of V.IA.Pervitskii's team] Mekhanizirovannoe vozdelyvanie kukuruzy; na opyte zvena V.IA.Pervitskogo. Moskva, Kolos, 1965. 183 p. (MIRA 18:12)

VASIL'CHENKO, A.A. (Kiyev)

Ukrainian medical scientists are developing stronger ties with foreign countries. Vrach.delo no.4:437-439 Ap '58 (MIRA 11:6)
(UKRAINE--MEDICINE)

DROZDOV, L.S.; VASIL'CHENKO, A.G., starshiy agronom-fitopatolog

Measures for controlling potato wart. Zashch. rast. ot vred. i bol. 3 no.4:41-42 Jl-Ag '58. (MIRA 11:9)

1. Nachal'nik Gosinspektsii po karantinu rasteniy (for Drozdov).
(Potato wart)

VASIL'CHENKO, A.G., fitopatolog

Quarantine restriction zones against potato wart. Zashch. rast. ot vred. i bol. 5 no.9:48-49 S '60. (MIRA 15:6)

1. Belorusskaya karantinnaya inspektsiya.
(Potato wart) (Plant quarantine)

TA 1777

VASIL'CHENKO A. I.

USSR/Medicine - Bacteria, Culture Media May 1947
Medicine - Bacteriology

"Cryptococcus Farciminosis Culture on Potatoes,"
A. I. Vasil'chenko, NIVOS, Irkutsk, 4 pp

"Veterinariya" No 5

Growth of the culture takes from 3 to 4 weeks. On agar, growth is facilitated by the addition of 2½ percent of glycerin; however, different scientists have gained different results as to optimum growing temperature for the culture, which ranges all the way from 18 to 35 degrees. No growth was observed at 37 degrees.

1777

VASIL'CHENKO, A.P.

137-58-5-9564

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 5, p 106 (USSR)

AUTHOR: Vasil'chenko, A.P.

TITLE: Advances in the Techniques of Hot Forging (Usovershenstvovaniye tekhnologii goryachey shtampovki)

PERIODICAL: V sb.: Progressivn. metody shtampovki i kovki. Khar'kov, Oblizdat, 1957, pp 113-128

ABSTRACT: Examples of advances in process engineering for the purpose of saving metal, reducing machining oversize, improving the quality of forgings, increasing die life, reducing labor requirements, and increasing labor productivity as brought about in the forge shop of the Khar'kov Transportation Machinery Plant are presented.

M. Ts.

1. Metals--Forging

Card 1/1

VASIL'CHENKO, A.V.

Saturation and leaching irrigation. Zemledelie 26 no.8:37-41 Ag '64. (MIRA 17:11)

1. Altayskiy sel'skokhozyaystvennyy institut.

VASIL'CHENKO, A.Ye.

Give more attention to raw materials of the down and feather industry. Ptitsevodstvo 9 no.7:47-48 Jl '59.
(MIRA 12:10)

1. Direktor Zaraysk pero-pukhovoy fabriki.
(Zaraysk--Feathers)

VASIL'CHENKO, F.A.; PARFENTSEV, N.A.

"Reference manual on highway landscaping". P.I. Sarsatskikh, V.I. Obolenskiĭ. Reviewed by F.A. Vasil'chenko, N.A. Parfentsev. Avt.dor. 18 no.2:31-32 Mr-Ap '55. (MLRA 8:6)
(Roadside improvement) (Sarsatskikh, P.I.) (Obolenskii, V.I.)

USSR/Cultivated Plants - Fruits. Berries. M-6

Abs Jour : Ref Zhur - Biol., No 7, 1958, 29995

Author : Vasil'chenko, G.
Inst :
Title : Fruit Raising in the Aleyskaya Steppe.

Orig Pub : S. kh. Sibiri, 1957, No 6, 96-98.

Abstract : The natural conditions of the Aleyskaya Steppe (Altayskiy Kray) are described. 25 years of experimentation at the Kolkhoz im. Molotov in Shipunovskiy Rayon, Rubtsovskiy Beet Sovkhoz, the "Krasnoflotets" Kolkhoz and collective and personal holding gardens have shown the possibility of a wider development of fruit raising.

Card 1/1

USSR/Cultivated Plants - Fruits, Berries. II-8

Abs Jour : Ref Zhur - Biol., No 9, 1958, 39467

Author : Vasil'chenko, G.
Inst : -
Title : Winter Resistance of the Roots of Apple Tree Rootstocks in Siberia.

Orig Pub : S.-Kh. Sibiri, 1957, No 7, 39-40.

Abstract : The testing of various apple tree rootstocks which took place from 1952 to 1956 in the Altai fruit-berries experiment station have shon that seedlings of the purple Renmet have a lowered root winter resistance. In winters without snow, when the soil is deeply frozen, trees grafted on these rootstocks perish. There is a selection of samples of Siberian apple trees (No 50, 75, 29, 9) distinguished by their winter and drought resistance. -- I.K. Fortunatov.

Card 1/1

VASIL'CHENKO, G.V., kand.sel'skokhoz.nauk

Regeneration of apple roots in the Altai Territory. Dokl.Akad. sel'khoz. 24 no.8:35-38 '59. (MIRA 12:11)

1. Altayskaya plodovo-yagodnaya opytnaya stantsiya. Predstavlena akademikom M.A.Lisavenko.
(Altai Territory--Apple) (Roots(Botany))

VASIL'CHENKO, G. V.: Cand. Master Agric Sci (diss) -- "The Siberian apple as grafting stock". Leningrad-Pushkin, 1958. 16 pp (Min Agric USSR, Leningrad Agric Inst), 150 copies (KL, No 6, 1959, 138)

VASIL'CHENKO, G.V.

Some characteristics of Malus pallasiana Juz. in the Altai.
Bot. zhur. 44 no.1:113-115 Ja '59. (MIRA 12:1)

1.Altayskoay plodovo-yagodnaya opytnaya stantsiya, Barnaul.
(Barnaul--Apple)

VASIL'CHENKO, G.V.

Drought resistance of the Siberian apple tree used as rootstock.
Fiziol. rast. 7 no.4:481-483 '60. (MIRA 13:9)

1. Altai Fruit and Berry Experimental Station, Barnaul.
(Apple) (Plants, Effect of aridity on)

VASIL'CHENKO, G.V.

Snow and the wintering of roots of fruit and berry crops. Izv. SO AN SSSR no. 8. Ser. biol.-med. nauk no.2:116-118 '63.
(MIRA 16:11)

1. Altayskaya plodovo-yagodnaya opytnaya stantsiya.

VASIL'CHENKO, G.V.

Frost resistance of the roots of fruit and berry crops in Siberia. Fiziol. rast. 10 no.4:400-404 Jl-Ag '63.
(MIRA 16:8)

1. Altai Fruit-Berry Experimental Station, Barnaul.

GAL'PERIN, M., inzh.; USHAKOV, G., inzh.; VASIL'CHENKO, G., inzh.

Resource has doubled. Grazhd. av. 21 no.8:28-29 Ag '64. (MIRA 18:4)

ACC NR: AP6032241 SOURCE CODE: UR/0084/66/000/010/0022/0022

AUTHOR: Cal'perin, M. (Engineer, Omsk); Vasil'chenko, G. (Engineer, Omsk)

ORG: none

TITLE: Introducing centrifugal oil cleaner

SOURCE: Grazhdanskaya aviatsiya, no. 10, 1966, 22

TOPIC TAGS: oil cleaning device, aviation oil cleaner, ~~oil cleaning~~ centrifuge, fuel oil, fuel contamination, lubricating oil, petroleum refinery equipment, aircraft engine, aircraft fuel system equipment, ASh-82V engine, ASh-82T engine

ABSTRACT: A centrifugal oil cleaner has been designed at the Omsk Engine Building Plant im. Baranov to clean impurities from aviation oils, which results from the operation of ASh-82V and ASh-82T engines on Il-14 airplanes and Mi-4 helicopters. Oil, injected into the centrifuge through tangentially located nozzles, imparts a circular motion to the centrifuge rotor. When the oil pressure reaches 3—4 kg/cm^2, the rotor spins at 5000 rpm. The heavy particles settle on the walls of the centrifuge, while the cleaned oil flows through the nozzles into the housing and is pumped out. A detailed description and drawing of the centrifugal oil cleaner are given. Orig. art. has: 1 figure.

SUB CODE: 21, 01, 11/ SUBM LATE: none

Card 1/1

USSR / Soil Science Tilling. Melioration. Erosion. J

Abs Jour : Ref Zhur - Biologiya, No 11, 1958, No. 48679

Author : Zheriker, L.; Vasil'chenko, G.

Inst : Not given

Title : On the Effectiveness of Fallowing by Mal'tsev" Method

Orig Pub : S.-kh. Sibiri, 1957, No 9, 28-31

Abstract : This article describes the results of production experiments carried out in Kalmanskiy Rayon of Altay Kray (1955) on the ordinary chernozem with the sowings of spring wheat. Under the conditions of the wet 1956 year, the yield of the spring wheat (a mixture of two varieties - Al'bidum 3700 and Mil'trum 553) was the same on the control and the experimental plots (16 centners/ha.). Considerable drying of the upper

Card 1/2

USSR / Soil Science Tilling. Melioration. Erosion. J

Abs Jour : Ref Zhur - Biologiya, No 11, 1958, No. 48679

layer of the soil was observed with the deep, moldbord-less cultivation of the fallow in the summertime. For the elimination of this phenomenon, it is recommended to carry out the moldbord-less tillage of the soils in the fall of the preceding year with an obligatory rolling of the tilled sections. -- F. N. Sofiyeva

Card 2/2

ACCESSION NR: AP4044124 S/0084/64/000/008/0028/0029

AUTHOR: Gal'perin, M. (Engineer); Ushakov, G.(Engineer); Vasil'chenko,G(Engineer)

TITLE: The resource is doubled

SOURCE: Grazhdanskaya aviatsiya, no. 8, 1964, 28-29

TOPIC TAGS: piston aircraft, scoring, local overheating, connecting rod, cylinder, side pressure, lubricant, oil

ABSTRACT: This article deals with the necessity of increasing the reliability and resources of piston aircraft. In the case of the Il-14, Il-12 and An-2 aircraft the main cause of trouble seems to be the scoring of the pistons no. 2 and 5 caused by local overheating and side pressure. These two pistons, coupled to the main connecting rods, are acted upon by forces of 2035 and 1600 kg during compression and expansion, respectively. The Omsk aircraft factory has solved the problem of decreasing the side pressure on the working surface of the pistons by means of decreasing the deformation of the cylinders through constant and uniform air cooling. The Omsk designers have succeeded in lowering the piston temperature, improving the cylinder lubricants and finally, reducing the loss of horsepower of the cylinders of

Card 1/2

ACCESSION NR: AP4044124

the main connecting rods. All these improvements have almost doubled the life span of these piston engines. Orig. art. has: 7 figures.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00

SUB CODE: AC NO REF SOV: 000 OTHER: 000

Card 2/2

MANYCH, A.D., inzhener-mekhanik; NOVOMIRSKIY, S.P., inzhener-mekhanik; DENISHEN-KO, I.P., brigadir; SHCHERBINSKIY, A.V., kombayner, Geroy sotsialisticheskogo truda; KISLYY, A.P., kombayner, Geroy sotsialisticheskogo truda; VASIL'CHENKO, G.A., Geroy sotsialisticheskogo truda; BUTENKO, V.I.; POLUYAN, V., kombayner.

Please think about it. Znan. sila 32 no.1:6-7 Ja '57. (MLRA 10:4)

1. Direktor Azovskoy ordena Lenina Mashinno-traktornoy stantsii (for Manych). 2. Zamestitel' direktora Azovskogo uchilishcha mekhanizatsii sel'skogo khozyaystva. No.2. (for Novomirskiy). 3. 10-ya traktornaya brigada Azovskoy ordena Lenina Mashinno-traktornoy stantsii (for Denisenko). 4. Azovskaya Mashinno-traktornaya stantsiya (for Shcherbinskiy, Kislyy, Vasil'chenko). 5. Master proizvodstvennogo obucheniya Azovskogo industrial'nogo tekhnikuma trudovykh rezervov (for Butenko). 6. Uchashchiysya gruppy perepodgotovki brigadirov traktornykh brigad Azovskogo uchilishcha mekhanizatsii sel'skogo khozyaystva, Samarskoy Mashinno-traktornoy stantsii (for Poluyan).
(Combines (Agricultural machinery))

VASIL'CHENKO, G. M.

"Ground Waters of the Cheleken Peninsula." Sub 18 Jan 51, Inst of Petroleum, Acad Sci USSR.

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55

AUTHOR: Rabinovich, V.P., Engineer and Vasil'chenko G.S., Engineer.

TITLE: English and American overspeed installations for testing turbine discs. (Angliyskiye i Amerikanskiye razgonnye ustanovki dlya ispytaniy turbinnykh diskov.) 114-6-10/11

PERIODICAL: "Energomashinostroenie" (Power Generation Machinery Construction) 1957, Vol.3, No. 6, pp. 29 - 32 (U.S.S.R.)

ABSTRACT: The importance of overspeed testing of turbine discs at high temperatures is pointed out and the general principles of overspeed test installations are explained. Descriptions are then given of the following installations: Massachusetts Institute of Technology, Napiers (U.K.) Rolls Royce, General Electric (USA), Boeing, Westinghouse (USA) and Warren Brothers (USA). After describing the installations it is stated that experimental investigation of the strength of turbine discs is still in the initial stages of development. However, the investigations which have been made have been important for the development of steam and gas turbines. The expenditure involved on overspeed installations has been fully justified.

There is now a definite tendency to develop overspeed testing in the way of closer approximation to actual discs and actual operating conditions.

Card 1/2 As experience with disc overspeed test installations

English and American overspeed installations for testing turbine discs. (Cont.) 114-6-10/11

accumulates it appears possible to create installations for overspeed testing of fully forged and welded rotors of modern turbines, which has been necessary for a long time. To judge from recent information the firm of General Electric has already commenced construction of such an installation.

There are 5 figures, 7 literature references (English and American.)

AVAILABLE:
Card 2/2

VASIL'CHENKO, G.S.

VASIL'CHENKO, G.S., inzh.; RABINOVICH, V.P., inzh.

Overspeed investigations for austenite and composite turbine discs. Teploenergetika 4 no.12:35-42 D '57. (MLRA 10:11)

1. Tsentral'nyy nauchno-issledovatel'skiy institut tekhnologii i mashinostroyeniya.

(Gas turbines)

SOV/96-59-6-9/22

AUTHORS: Vasil'chenko, G.S. (Engineer) and Amel'yanchik, A.V. (Candidate of Technical Sciences)

TITLE: An Investigation into the Strength of Model Gas-Turbine Discs (Issledovaniye prochnosti modeley diskov gazovykh turbin)

PERIODICAL: Teploenergetika, 1959, Nr 6, pp 49-56 (USSR)

ABSTRACT: Calculation of the stresses in the disc with allowance for plastic deformation is usually related either to discs working under conditions of plastic deformation or to the safety factor of discs. In the first case the plastic deformations are usually small but in the second they may be considerable. It was assumed that the theory of small elastic deformations was also applicable to these latter conditions and good agreement between theory and experiment confirmed this view. Since the problem has been solved for a hot rotating disc operating in the plastic region it is now necessary to determine the stresses and displacements with allowance for the influence of temperature on the deformation diagram. The method used here is based on the theory of small elastic deformation which was applied to discs by Kinasoshvili (Ref 2) and Birger (Ref 3). In the present work the

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SOV/96-59-6-9/22

An Investigation into the Strength of Model Gas-Turbine Discs

calculations on discs are made by solving successive elastic problems with variable elastic parameters in the form proposed by Birger. The individual elastic problems are solved by satisfying the equations of equilibrium in the displacements. According to Rabotnov's theory of ageing (Ref 4), the problem of creep can be reduced to a problem of plasticity in which the deformation diagram depends on time. A 'Strela' computer was used in the calculations. The method of making successive calculations of the modulus of plasticity, Young's modulus and Poisson's ratio, is explained. The calculations are repeated until the equivalent stresses determined by the calculation and the stresses obtained from the deformation diagram coincide within previously determined limits. The system of equilibrium equations (5) is used in solving the elastic problem. By solving this system of equations it is possible to determine the distribution of displacement over the radius of the discs. The stresses are then calculated from the displacement. The 'Strela' computer completes both operations in about a minute. If the

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An Investigation into the Strength of Model Gas-Turbine Discs

disc is divided into 19 intervals the accuracy of the solution is about 0.5 or 1% of stress. For the elastic calculation of a disc by the method described, deformation curves must be constructed. This entails statistical treatment of tensile test results from the largest possible number of specimens of the material. The specimens should have been tested over the whole of the relevant temperature range. Austenitic steels grades EI-405 and EI-612 were used in these investigations and the deformation curves were determined from three or four tensile tests at each of the temperatures chosen. A graph showing the distribution of remanent displacement over the radius of a disc of steel grade EI-405 is given in Fig 1. The dotted line is based on the mean, and the bold line on the maximum, values of the experimental deformation curves. It will be seen that the differences are not very great but the best agreement with experiment is obtained by using the minimum properties. Deformation curves constructed for steel grade EI-612 over the entire temperature range of 400 to 700 °C showed a single wide band of experimental

An Investigation into the Strength of Model Gas-Turbine Discs

points, as in Fig 2. The calculated displacement distribution over the radius of a flat disc of steel EI-612 determined from the bold-line deformation curves in Fig 2 is given in Fig 3. Fig 3 also includes experimental values of remanent displacement measured on the internal and external diameters of two discs and obtained during short-term tests. It will be seen from curves 1 and 3 that there is good agreement between the experimental values and those calculated on the computer. This confirms the applicability of the theory of small elastic deformations to this case. As has been mentioned, creep determinations can also be made on the computer. Unfortunately, the creep data available for the materials used for the discs are inadequate for the purposes of accurate calculations, as they are usually only given at maximum temperatures and do not allow for batch to batch variation in the quality of the steel. Therefore, the 200-hour creep test curves given in Fig 2 for steel EI-612 (dotted lines) are only approximate. However, the application of these approximate curves to calculation of the remanent displacement distribution

Card 4/7

An Investigation into the Strength of Model Gas-Turbine Discs

over the radius of a disc of steel EI-612 gave results in agreement with experiment. Remanent displacements were measured on the internal and external diameters of a disc of steel EI-612 subjected to long-term testing at 16000 r.p.m. with a temperature change over the radius of 405 to 670 °C. Curves of the measurements are compared with calculated curves in Fig 3. It will be seen that the calculated displacements are somewhat higher than the experimental values after 82 hours testing, but lower after 208 hours. It should be mentioned that failure of the disc had evidently commenced at 208 hours. Long-term strength tests were made on four discs of steel EI-612 and one disc of EI-405 in the overspeed test of the Institute. The external diameter of these discs was 450 mm, the internal bore 70 mm and the thickness 35 mm. The test conditions and results are tabulated. Baranov's formula (9) was used to determine the test speed. Long-term strength tests were made on specimens cut from one of the discs of the batch. The results and the long-term strength curve constructed from them for 200 hours as function of temperature are given in

An Investigation into the Strength of Model Gas-Turbine Discs

Fig 4. For purposes of calculation this curve was reconstructed as shown in Fig 5, in coordinates of stress and disc-radius. The test speeds calculated from formula (9) considerably exceeded the actual failure speeds of all four discs of steel EI-612, as will be seen from the table. The experimental results given in Fig 5 are discussed at some length and the following criterion of short- or long-term failure of turbine discs is formulated: failure occurs when the greater principal tensile stress on any radius reaches the ultimate strength or long-term ultimate strength of the disc material at this radius. The time to failure is governed by the corresponding long-term strength curve. A number of factors that must be taken into account in determining the stress conditions of a disc are described. The great difference between the experimental and calculated values of the speed at failure found for steel EI-612 is explained by its brittleness. Consequently the stresses caused by the temperature drop and centrifugal forces could not be redistributed as they were in the more plastic steel EI-405, which did

An Investigation into the Strength of Model Gas-Turbine Discs

not fail. It is clear that the static temperature stresses have an important influence on the strength of discs made of brittle materials. In designing turbine discs of such material it is evidently essential to determine the stresses accurately and to choose a disc configuration that obviates sharp temperature peaks. There are 7 figures, 1 table and 8 references, of which 7 are Soviet and 1 English.

ASSOCIATION: TsNIITMASh

VASIL'CHENKO, G.S., inzh.; TIMOFEYEV, M.M., kand.tekhn.nauk

Manufacturing disk models from steel of various types and evaluating their long-term strength. Teploenergetika 7 no.5: 39-44 My '60. (MIRA 13:8)

1. TSentral'nyy nauchno-issledovatel'skiy institut tekhnologii i mashinostroyeniya.
(Gas-turbine disks)

S/590/62/104/000/003/006
I007/I207

AUTHORS: Timofeyev, M. M., Candidate of Technical Sciences and Vasil'chenko, G S., Engineer

TITLE: Composite turbine discs of different steel grades for the ЭГТУ-1000 (EGTU-1000) gas-turbine power plant

SOURCE: Moscow. Tsentral'nyy nauchno-issledovatel'skiy institut tekhnologii i mashinostroyeniya [Trudy], v. 104. 1962, Voprosy svarski v energomashinostroyenii, 100-109

TEXT: This is a report on investigations of operational reliability, methods of welding and manufacturing and testing composite turbine discs for the experimental ЭГТУ-1000 (EGTU-1000) gas-turbine power plant designed by the TsNIITMASh. After a brief outline of the welding methods for the disc core and its rim, both made of differing steel grades, the methods of test running and quality control as well as their results are amply described. The investigations revealed the high impact strength of the material used for composite turbine discs. The safety margin during a 100,000-hr cycling test exhibited satisfactory values. The new type of composite disc proved to be of particular efficiency for long-time operations at a rim temperature of about 600°C and a core (central) temperature of about 400°C. The technological process worked out at the above institute may be recommended for the manufacture of composite discs from the following steel grades.

Card 1/2

disc center, ЭИ 415 (EI 415) steel; rim, ЭИ 612 (EI 612) steel. There are 4 figures, 1 table and 6 references The English reference Manson, S. S., "Report N-CA" N 1170, 1952.

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut tekhnologii i mashinostroyeniya (Central Scientific Research Institute of Technology and Machine-Building).

VASIL'CHENKO, G. S.

20

PHASE I BOOK EXPLOITATION SOV/6086

Nauchnoye soveshchaniye po teplovym napryazheniyam v elementakh turbomashin. 2d, Kiyev, 1961.

Teplovyye napryazheniya v elementakh turbomashin; doklady nauchnogo soveshchaniya., vyp. 2 (Thermal Stresses in Turbomachine Parts; Reports of the Scientific Conference, no. 2). Kiyev, Izd-vo AN UkrSSR, 1962. 174 p. 1800 copies printed.

Sponsoring Agency: Akademiya nauk Ukrainskoy SSR. Institut mekhaniki.

Resp. Ed.: A. D. Kovalenko, Academician, Academy of Sciences UkrSSR; Ed.: T. K. Remennik; Tech. Ed.: A. M. Lisovets.

PURPOSE: This collection of articles is intended for scientific workers and turbine designers.

Card 1/6

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SOV/6086

Thermal Stresses (Cont.)

COVERAGE: The book contains 18 articles dealing with investigations connected with thermal stresses in turbine components. Individual articles discuss thermoelasticity, thermoplasticity, thermal conductivity, and temperature fields. No personalities are mentioned. References accompany 17 articles. The conference recommended broadening the theoretical and experimental investigations of aerothermoelastic and aerothermoplastic problems, the development of investigations of general problems of the theory of thermoelasticity and thermoplasticity based on the thermodynamic principles of reversible and nonreversible processes, the development of effective calculation methods for thermal stresses taking into account plastic deformations and creep in thin- and thick-walled structural members under stationary and nonstationary operating conditions, the development of experimental-research methods for thermometry and tensiometry in connection with modern operational conditions of mechanical structures, and the broadening of investigations of problems in the thermostrength of structures, especially of those operating under conditions of frequent and sharp temperature changes.

Card 2/6

L 40043-66 EWP(k)/EWT(d)/EWT(m)/EWP(h)/T/EWP(l)/EWP(w)/EWP(v)/EWP(t)/ETI IJP(c)
ACC NR: AP6016584 (A,N) RH/JD/HW SOURCE CODE: UR/0129/66/000/005/0014/0017

AUTHORS: Gordiyenko, L. K.; Geminov, V. N.; Fridman, Z. G.; Vasil'chenko, G. S.; Rybovalov, Yu. P. 65 B

ORG: Institute of Metallurgy im. A. A. Baykov (Institut metallurgii); TsNIITMASh

TITLE: Raising the creep resistance of steel of the martensite-ferrite class by methods of mechanical thermal processing

SOURCE: Metallovedeniye i termicheskaya obrabotka metallov, no. 5, 1966, 14-17

TOPIC TAGS: metallography, mechanical heat treatment, creep, metal deformation, martensite steel, ferrite steel, deformation testing machine / IP-2 deformation testing machine, IP-5 deformation testing machine, IM-4R deformation testing machine, 1Kh12V2MF martensite steel

ABSTRACT: Research was conducted for the purpose of finding effective combinations for strengthening steel 1Kh12V2MF. This steel was used in the preparation of tubular disks and was worked at a temperature of 550C. Several thermomechanical processes were used in preparing the specimens for testing. The processes were treated as parametric cases for the strength-creep measurements. Among the testing equipment were machines IP-2, IP-5, and IM-4R. Several effects were measured, including the effect of the degree of deformation on the strengthening for several methods of thermomechanical processing, the creep rate at constant stress, and temperature for

Card 1/2 UDC: 669.14.018.45:621.78:539.374

L 40043-66

ACC NR: AP6016584

different processes, and the increase in creep stability obtainable through the use of optimal thermomechanical processes. It was found that optimal processing can reduce the creep rate by as much as 80% over the rate which characterizes the unstrengthened material. The steps involved in the recommended optimal process are sequentially summarized. Orig. art. has: 3 tables and 2 figures.

SUB CODE: 11/13/SUBM DATE: none/ ORIG REF: 004

Card 2/2 gd

L 07546-67 EWT(d)/EWT(m)/EWP(w)/...

ACC NR: AP6029860 SOURCE CODE: UR/0096/66/000/009/0056/0061

HM/EM

AUTHOR: Vasil'chenko, G. S. (Candidate of technical sciences); Timofeyev, M. M. (Candidate of technical sciences); Skoromnaya, L. I. (Engineer)

ORG: TSNIITMASH

TITLE: Acceleration tests of models of welded rotors and evaluation of their constructional strength

SOURCE: Teploenergetika, no. 9, 1966, 56-61

TOPIC TAGS: turbine rotor, turbine design, welding technology

ABSTRACT: In the construction of transport type gas turbines, wide use is made at the present time of pin joints to fasten the disks to the rotor. An economic analysis shows that the use of all-welded rotors would be 30% cheaper than the pin joint type. The present article presents the results of an investigation of the construction strength of welded rotors under conditions approximating actual operating conditions. The experimental models of welded rotors were smaller by 1.2 times than for actual operating gas turbine rotors. They were made of nickel alloy EI-765. The models were tested under heating conditions which simulated actual operating conditions. Rotation of the models varied from 1035 to 1700 radians/sec. Experimental results are given in a series of curves and tables. The following conclusions were drawn: 1) the weakest

Card 1/2 UDC: 621.438:620.17.001.5

L 07545-67

ACC NR: AP6029860

part of the welded rotors tested was found to be the cylindrical shells at the point of juncture with the supporting disks (this was confirmed by the nature of the failure and by mathematical analysis); 2) failure of the shells starts at a determined inertial load and takes the form of breaking away of the shells from the supporting disks; 3) in no case did the failure of the models start at the welded joint or in the zone around the joint; 4) to improve the construction of the welded rotor, the diameters of the cylindrical shells were somewhat decreased. In addition, the thickness of the disk at the inner surface of the shell was increased by 20-25%; 5) for welded rotors, the danger point is not the welded seam but, as for conventional disks, cyclic changes in the temperature conditions. Orig. art. has: 7 figures and 2 tables.

SUB CODE: 10, 11, 21/ SUBM DATE: none/ ORIG REF: 005

Card 2/2 ecp

ACC NR: AP6021814 (A) SOURCE CODE: UR/0413/66/000/012/0094/0094

INVENTOR: Vasil'chenko, G. S.; Chernyavskiy, L. L.; Romanov, V. S.; Skoromnaya, L. I.; Mart'yanov, N. S.

ORG: None

TITLE: An installation for strength tests of the working wheels in high-speed turbines. Class 42, No. 182913 [announced by the Central Scientific Research Institute of Technology and Machine Building (Tsentral'nyy nauchno-issledovatel'skiy institut tekhnologii i mashinostroyeniya)]

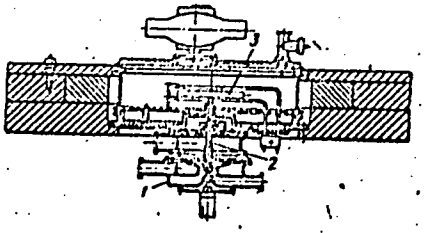
SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 12, 1966, 94

TOPIC TAGS: turbine rotor, test facility

ABSTRACT: This Author's Certificate introduces an installation for strength tests of the working wheels in high-speed turbines. The unit contains a turbine drive, vacuum chamber with cylindrical wall surrounded by an annular jacket, and a device for induction heating of the components being tested. A drive shaft passes through the cylindrical wall of the vacuum chamber for holding the part to be tested. The rotational velocity of the part being tested is increased by making the turbine drive in the form of a centripetal-flow air turbine with the component to be checked mounted on its drive shaft.

Card 1/2 UDC: 620.172.253:620.1.05

ACC NR: AP6021814



1--air turbine; 2--drive shaft; 3--part being tested

SUB CODE: 13/ SUBM DATE: 19Jul65

Card 2/2

VASIL'CHENKO, G.S.

Coagulation of the thalamo-tuberine artery for cutting off the blood supply to the anterior section of the thalamus in dogs. Vop.neirokhir. 20 no.4:15-18 Jl-Ag '56. (MIRA 9:11)

1. Iz laboratorii eksperimental'noy patofiziologii vysshey nervnoy deyatel'nosti zhivotnykh Instituta nevrologii Akademii meditsinskikh nauk SSSR.

(THALAMUS, physiol
eff. of exper. necrosis of anterior section of tubercule of thalamus in dogs by electrocoagulation of thalamo-tuberine artery)

VASIL'CHENKO, G. S.

Behavior and conditioned reflex activity in dogs following bilateral exclusion of the blood supply to the cisternae of the thalamotuberina arteries. Nauch. trudy Inst. nevr. AMN SSSR no.1:373-381 '60. (MIRA 15:7)

1. Institut nevrologii AMN SSSR.

(CONDITIONED RESPONSE)
(OPTIC THALAMUS--SURGERY)

VASIL'CHENKO, G.S.

[Pathogenetic mechanisms of impotence] Patogeneticheskie mekhanizmy impotentsii. Moskva, Medgiz, 1956. 170 p. (MLRA 9:5)
(IMPOTENCE)

VASIL'CHENKO, G.T. (Novyy Oskol)

Remark of A.I. Shavernev in the issue no.5, 1958. Mat. v shkole no.5:68 S-O '59. (MIRA 13:2)
(Geometry--Problems, exercises, etc.)

SOV/112-58-1-293

Translation from: Referativnyy zhurnal, Elektrotekhnika, 1958, Nr 1, p 43 (USSR)

AUTHOR: Vasil'chenko, G. V.

TITLE: On the Energy Dissipation in Downstream Water by Means of Opposing Jets (O gashenii energii v nizhnem b'yefe sooruzheniy vstrechnymi struyami)

PERIODICAL: Sb. stud. nauch. rabot. Belorussk. politekhn. in-t, 1957, Nr 3, pp 75-76

ABSTRACT: Bibliographic entry.

AVAILABLE: Library of Congress

1. Water--Energy

Card 1/1

VASIL'CHENKO, G.V., Cand Tech Sci--(diss) "Hydraulic design of head spillways." Minsk, 1958. 20 pp (Min of Higher Education USSR. Belorussian Polytech Inst im I.V.Stalin. Chair of Hydraulic Engineering Construction), 170 copies. Bibliography: 4 pp 19-20 (KL,48-58, 104)

8(6), 14(6) SOV/112-59-5-8650

Translation from: Referativnyy zhurnal. Elektrotekhnika, 1959, Nr 5, pp 36-37 (USSR)

AUTHOR: Drozd, P. A., and Vasil'chenko, G. V.

TITLE: Measuring the Discharge Coefficient of Spillway Openings at a Hydroelectric Station

PERIODICAL: Dokl. AN BSSR, 1958, Vol 2, Nr 2, pp 73-77

ABSTRACT: If a spillway opening has a varying cross-section, the discharge coefficient is determined from the total resistance of individual portions. Cases are considered of reducing the outlet cross-section during closing the gate with a constant head and of full-opening the gate with a varying head. Discharge-coefficient tables are presented.

I.I.O.

Card 1/1

SOV/143-59-8-17/22

8(6)

AUTHOR: Vasil'chenko, G.V., Candidate of Technical Sciences

TITLE: On Some Regularities of a Turbulent Flow in a Round Tube

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Energetika, 1959, Nr 8, pp 98-104 (USSR)

ABSTRACT: Explanations of regularities to which the motion of a liquid is subjected in a round tube in the presence of turbulent conditions are of great importance for calculating water supply systems of thermal power plants, penstocks of hydroelectric power plants and in a number of other cases. The author explains in this paper the results of investigations of a field of averaged, longitudinal velocities and pressure losses in a turbulent flow in a round tube with even motion. The relations presented in this paper may be used for determining averaged, longitudinal velocities and pressure losses in round tubes with turbulent conditions. They may be used for a number of

Card 1/2

On Some Regularities of A Turbulent Flow in a Round Tube

practical purposes, since the errors of the calculation results will not exceed 5+10%. The paper was presented at the Kafedra gidrotekhnicheskogo stroitel'stva (Department of Hydraulic Construction). There are 3 graphs and 5 Soviet references.

ASSOCIATION: Belorusskiy politekhnicheskiy institut (Belorussian Polytechnic Institute)

SUBMITTED: April 7, 1959

Card 2/2